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PCT/US2003/036001

SEQUENCE LISTING

<110> Wu, Shilan
 Hayashi, Jon H.
 Kinne, Lyle P.
 Dierks, Peter M.

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Cys Val Val Leu Ala Leu Glu Glu His Leu Pro Asn Gly Asp Lys Thr
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Ile Leu Ala Gln Asn Leu Glu Lys Thr Glu Ala Tyr Phe Leu Gly Ile
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 Phe Cys Val Glu Ala Ser Leu Lys Ile Leu Ala Leu Gly Phe Val Leu
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 Val Val Val Thr Gly Ile Ile Thr Gln Leu Pro Ile Ala Pro Ala Asp
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 130 135 140
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 Lys Ala Met Ala Pro Leu Leu Gln Ile Gly Leu Leu Val Leu Phe Ala
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 Ile Val Ile Phe Ala Ile Ile Gly Leu Glu Phe Tyr Ser Gly Ala Leu
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 His Lys Thr Cys Tyr Asn Leu Glu Asp Ile Ser Glu Ile Val Asn Glu
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 Tyr Phe Val Pro Leu Ile Val Leu Gly Ser Phe Phe Met Leu Asn Leu
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Val Leu Gly Val Leu Ser Gly Glu Phe Ala Lys Glu Arg Glu Lys Val
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 Arg Glu Leu Asn Gly Tyr Val Glu Trp Ile Cys Lys Ala Glu Glu Val
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 Glu Ala Arg Arg Arg Ala Ala Ala Lys Lys Lys Leu Lys Asn Leu Gly
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 Lys Ser Lys Ser Thr Asp Thr Glu Glu Glu Glu Gln Asp Glu Asp Cys
 385 390 395 400
 Gly Asp Asp Gly Phe Leu Lys Ser Lys Ala Arg Ser Ala Gly Arg Phe
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 Thr Val Lys Thr Gln Trp Phe Tyr Trp Phe Val Ile Val Leu Val Leu
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 Met Met Glu Met Trp Val Lys Met Tyr Ala Leu Gly Pro Arg Ile Tyr
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1310						1315					1320			
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Gln Gln Pro Ser Ser Ser Ser Ser Val Ser Ala Ile Arg Arg Gln
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Leu Asp Lys Ala Arg Glu Lys Pro Val Ala Phe Ala Val Arg Thr Asn
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Val Ser Tyr Asp Gly Thr Val Asp Asp Asp Ser Pro Val His Gly Ser
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 Ala Ile Ser Phe Glu Val Arg Asp Phe Leu His Ile Lys Glu Lys Tyr
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 Gly Phe Ile Pro Ser Pro Val Lys Leu Glu Ala Val Arg Ser Gly Leu
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 Glu Lys Arg Lys Pro Phe Phe Lys Lys Ala Glu Ala Ser Thr Pro Tyr
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 Asp Val Val Pro Ser Met Arg Pro Val Val Ile Val Gly Pro Ser Leu
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 Lys Gly Tyr Glu Val Thr Asp Met Met Gln Lys Ala Leu Phe Asp Phe
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 Asp Ile Ser Leu Ala Lys Arg Ser Leu Leu Asn Asn Pro Ser Lys Arg
 245 250 255
 Ala Ile Met Glu Arg Ser Asn Ser Arg Ser Thr Cys Leu Ala Glu Val
 260 265 270
 Gln Ala Glu Ile Glu Arg Ile Phe Glu Leu Ala Arg Thr Leu Gln Leu
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 Val Val Leu Asp Cys Asp Thr Ile Asn His Pro Ser Gln Leu Ala Lys
 290 295 300

Thr Ser Leu Ala Pro Thr Ile Val Tyr Leu Lys Ile Ser Ser Pro Lys
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 Val Leu Gln Arg Leu Ile Lys Ser Arg Gly Lys Gly Gln Thr Lys Asn
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 Glu His Ile Ala Glu Tyr Leu Glu Ala Tyr Trp Arg Ala Thr His Pro
 370 375 380
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His Gly Ser Ala Ile Ser Phe Glu Val Arg Asp Phe Leu His Ile Lys
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Ser Asp Val Gly Phe Ile Pro Ser Pro Val Lys Leu Glu Ala Val Arg
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Ser Gly Leu Gly Ala Arg Arg Tyr Pro Arg Pro Ala Ser Ala Ala Pro
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165

170

175

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Lys Thr Ser Leu Ala Pro Thr Ile Val Tyr Leu Lys Ile Ser Ser Pro
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Lys Val Leu Gln Arg Leu Ile Lys Ser Arg Gly Lys Gly Gln Thr Lys
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Cys Glu His Ile Ala Glu Tyr Leu Glu Ala Tyr Trp Arg Ala Thr His
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 385 390 395 400

His Asn Ala His Ala Met Pro Gly Gly Arg Ser Arg Ala Ala Arg Pro
 Page 29

405

410

415

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Pro Arg Glu Arg Ala His Ala Ala His Ala Ala Ala Pro His Asp Ala
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 Arg Lys Pro Phe Phe Lys Lys Ala Glu Ala Ser Thr Pro Tyr Asp Val
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 Val Pro Ser Met Arg Pro Val Val Ile Val Gly Pro Ser Leu Lys Gly
 210 215 220
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 Arg Arg Phe Glu Gly Arg Ile Ile Ile Thr Arg Val Gln Ser Asp Ile
 Page 32

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Ser Leu Ala Lys Arg Thr Gln Asn Ala Pro Lys Lys Pro Phe Val Glu
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Arg Ala Gly Asn Arg Thr Asn Cys Leu Ala Glu Ala Glu Ile Glu Arg
275 280 285

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Lys Ser Arg Gly Lys Gly Gln Thr Lys Asn Leu Ser Val Gln Met Val
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Ala Ala Glu Lys Leu Ala Gln Cys Pro Pro Asp Met Phe Asp Val Ile
355 360 365

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Asp Pro Pro Ala Asn Thr Gly Gly His Arg Glu Arg Ser Asp Ser Tyr
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Glu Arg Gly Tyr Pro Arg Asp Tyr His Glu Tyr Gly Pro Glu Tyr Pro
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Arg Glu Arg Ala His Ala Ala His Ala Ala Ala Pro His Asp Ala Tyr

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485

490

495

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4383

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Tyr Arg Val Lys Ile Pro Glu Arg Phe Gln Thr Leu Asn Thr Thr Arg
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Cys Lys Cys Tyr Cys Asp Lys Glu Leu Met Leu Ser Leu Ile Tyr Asp
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Val Gln Ser Met Ser Asp Asp Ile Arg Ala Met Met Glu Leu Lys Ile
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Ser Ala Val Lys Arg Ile Val Glu Ala Ala Glu Asn Met Ala Phe Asp
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Lys Gln Asn Glu Pro Val Pro Glu Asp Phe Gln Phe Tyr Asn Ser Lys
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Glu Met Glu Glu Pro Trp Asp Glu Val Ser Ile Thr Thr Thr Pro Glu
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Thr Asp Phe Gly Gln Glu Ser Trp Ile Val Arg Pro Pro Ser Lys Asn
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Ser Ala Ser Asp Glu Lys Ala Val Glu Phe Ile Gln Arg Phe Gly Tyr
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His Tyr Val Asp Pro Leu Ser Tyr Val Tyr Ser Val Asp Leu Ser Thr
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Val Lys Phe Pro Leu Asn Val Ser Leu Ala Leu Val Thr Ala Ser His
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24

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28

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<210> 75
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Cys Asn Gln Ala Ile Met Ile Val Ser
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Pro Leu Thr Lys Val Ile Gly Leu Leu Pro Arg
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